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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte KIMIKAZU FURUKAWA, TOMOYOSHI TAKEBAYASHI,
TOSHIHIRO AZAMI, KATSUTOSHI YANO,
JUN KAKUTA, and YASUO SATO

Appeal 2007-2245
Application 09/046,677¹
Technology Center 2600

Decided: January 28, 2008

Before ANITA PELLMAN GROSS, ROBERT E. NAPPI, AND MARC S.
HOFF, *Administrative Patent Judges*.

HOFF, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF CASE

Appellants appeal under 35 U.S.C. § 134 from a Final Rejection of claims 1-6, 8-13, and 15-20. We have jurisdiction under 35 U.S.C. § 6(b).

We reverse.

Appellants' invention relates to a communication support system that enables a user of a telephone unit to transmit a command signal to a

¹ Application filed March 24, 1998. The real party in interest is Fujitsu Limited.

communication control device to obtain a telephone service from a data processing device while inhibiting transmission of a signal from the telephone unit to the telephone network when the data processing device is remotely controlled by the telephone user (Specification 6).

Claim 1 is exemplary:

1. A communication support system which is adapted to connect a telephone unit through a communication control device to a data processing device and adapted to connect a telephone network to the communication control device, the communication support system comprising:

a command signal recognition unit either detecting a Dual Tone MultiFrequency (DTMF) command signal sent from the telephone unit or a network DTMF command signal sent from the telephone network, and determining, when the DTMF command signal is from the telephone unit, which one of a plurality of telephone services of the data processing device the DTMF command signal from the telephone unit indicates, wherein the command signal recognition unit includes a DTMF detection unit that detects the network DTMF signal sent from the telephone network, the DTMF command signal from the telephone unit having a predetermined value different from a value of the network DTMF signal:

a signal transmission inhibition unit including a switch connected between the telephone network and either the telephone unit or the data processing device to switch therebetween so as to selectively open-circuit the telephone network from either of the telephone unit or the data processing device, and when the telephone network is open-circuited from either of the telephone unit or the data processing device, completely blocks transmission of the DTMF command signal from the telephone unit to the telephone network and allows transmission of the DTMF command signal directly to the data processing device when the DTMF command signal indicates one of the plurality of telephone services; and

a telephone service processing unit that performs a telephone service processing of the data processing device for the telephone service indicated by the DTMF command signal from the telephone unit, the telephone service processing unit starting execution of the telephone service processing when the command signal recognition unit determines that the DTMF command signal is from the telephone unit.

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

| | | |
|---------|-----------------|---------------|
| Amadasi | US 3,569,634 | Mar. 9, 1971 |
| Rosen | US 5,864,607 | Jan. 26, 1999 |
| Manning | US 5,898,756 | Apr. 27, 1999 |
| Bulfer | US 6,208,966 B1 | Mar. 27, 2001 |

Claims 1-6, 8-13, and 15-20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Manning in view of Rosen, Amadasi, and Bulfer.

Appellants contend that the Examiner erred in his rejections because (a) Manning teaches *connecting a load* so as to *attenuate* the signal between the telephone unit and telephone network, rather than *selectively open-circuiting* the telephone network from either the telephone unit or the data processing device (Br. 5); and (b) the proposed combination of Manning with Amadasi would render Manning unsatisfactory for its intended purpose (Br. 6). The Examiner contends the claims are properly rejected because, in the Examiner's view, attenuating a signal to the point that it cannot be recognized by the telephone network has the same effect as open-circuiting the signal line; thus, Manning may properly be modified by Amadasi in order to arrive at the claimed invention (Ans. 6).

Rather than repeat the arguments of Appellants or the Examiner, we make reference to the Briefs and the Answer for their respective details. Only those arguments actually made by Appellants have been considered in this decision. Arguments that Appellants could have made but chose not to make in the Briefs have not been considered and are deemed to be waived. *See* 37 C.F.R. § 41.37(c)(1)(vii).

ISSUE

The principal issue in the appeal before us is whether the Examiner erred in holding that it would have been obvious to modify Manning's teaching of selectively *attenuating* a signal between a telephone unit and a telephone network in order that DTMF signals from the telephone unit would not be recognized by the telephone network, such that the signal between the telephone unit and telephone network is *open-circuited* instead, as suggested by Amadasi.

FINDINGS OF FACT

The following Findings of Fact (FF) are shown by substantial evidence.

The Invention

1. According to Appellants, they have invented a communication support system that enables a user of a telephone unit to transmit a command signal to a communication control device to obtain a telephone service from a data processing device while inhibiting transmission of a signal from the telephone unit to the telephone network when the data processing device is remotely controlled by the telephone user (Specification 6).

2. Appellants' communication control device (see Fig. 1) includes a line switching unit 5, which selectively provides either (a) connection of the telephone unit 1 and telephone network 4 through the line switching unit, or (b) disconnection of the telephone network from the telephone unit (Specification 13).

Manning

3. Manning teaches a parallel-connected device that inhibits the transmission of dialing signals over a telephone link. An a.c. load, preferably a series-connected capacitor and resistor, is provided to inhibit transmission by attenuation of the signals, preferably by at least 30 dB, so that the signals will not initiate action by the central office (*i.e.*, telephone network)(col. 2, ll. 8-15).

4. One of Manning's goals is "transparency," i.e. that a user be able to use the telephone as before without any inconvenience due to the presence of the inventive circuit(s)(col. 2, ll. 19-26).

5. Manning operates such that the signal between the telephone unit and telephone network, and the dial tone heard by the user, is attenuated for approximately 200 milliseconds, a short enough period that the typical user will not notice or care that the dial tone was interrupted (col. 6, ll. 54-60).

Amadasi

6. Amadasi teaches disconnecting a telephone unit from the telephone network when the first number dialed (e.g., 0, 1, 9) corresponds to a type of call desired to be blocked (col. 1, ll. 24-35).

Rosen

7. Rosen teaches a computer system and a telephone coupled to a local telephone network line, the telephone being taken off-hook to enter a voice command. A transmitter communicates the voice command from the telephone to the computer system without the telephone seizing the external phone line (col. 1, ll. 29-34).

Bulfer

8. Bulfer teaches a telecommunications network service for converting spoken words to individual DTMF (touch-tone) signals to be furnished to an automated system responsive to touch-tone control thereof.

PRINCIPLES OF LAW

In rejecting claims under 35 U.S.C. § 103, the Examiner bears the initial burden of establishing a prima facie case of obviousness. *In re Piasecki*, 745 F.2d 1468, 1472 (Fed. Cir. 1984). The Examiner can satisfy this burden by showing some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. *KSR Int'l. v. Teleflex Inc.*, 127 S. Ct. 1727, 1741 (2007) (citing *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)). Only if this initial burden is met does the burden of coming forward with evidence or argument shift to the Appellant. *Piasecki*, 745 F.2d at 1472. Thus, the Examiner must not only assure that the requisite findings are made, based on evidence of record, but must also explain the reasoning by which the findings are deemed to support the Examiner's conclusion.

As was recently described in *In re Kahn*, 441 F.3d 977 (Fed. Cir. 2006):

[T]he “motivation-suggestion-teaching” test asks not merely what the references disclose, but whether a person of ordinary skill in the art, possessed with the understandings and knowledge reflected in the prior art, and motivated by the general problem facing the inventor, would have been led to make the combination recited in the claims. From this it may be determined whether the overall disclosures, teachings, and suggestions

of the prior art, and the level of skill in the art –
i.e., the understandings and knowledge of persons
having ordinary skill in the art at the time of the
invention-support the legal conclusion of
obviousness. (internal citations omitted).

Id. at 988. To establish a prima facie case of obviousness, the references being combined do not need to explicitly suggest combining their teachings. *See id.* at 987-88 (“the teaching, motivation, or suggestion may be implicit from the prior art as a whole, rather than expressly stated in the references”). “The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art.” *Id.* at 987-88 (quoting *In re Kotzab*, 217 F.3d 1365, 1370 (Fed. Cir. 2000)).

The determination of obviousness must consider, *inter alia*, whether a person of ordinary skill in the art would have been motivated to combine the prior art to achieve the claimed invention and whether there would have been a reasonable expectation of success in doing so. *Brown & Williamson Tobacco Corp. v. Philip Morris, Inc.*, 229 F.3d 1120, 1124 (Fed. Cir. 2000). *Medichem S.A. v. Rolabo S.L.*, 437 F.3d 1157, 1164 (Fed. Cir. 2006). Where the teachings of two or more prior art references conflict, the Examiner must weigh the power of each reference to suggest solutions to one of ordinary skill in the art, considering the degree to which one reference might accurately discredit another. *In re Young*, 927 F.2d 588, 591 (Fed. Cir. 1991). If the proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*,

733 F.2d 900, 902 (Fed. Cir. 1984). Further, our reviewing court has held that “[a] reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant.” *In re Gurley*, 27 F.3d 551, 553 (Fed. Cir. 1994); *Para-Ordnance Mfg. v. SGS Importers Int’l*, 73 F.3d 1085, 1090 (Fed. Cir. 1995).

ANALYSIS

Claims 1, 3-6, 8-10, 12, 13, and 15-20

Appellants argue that the Examiner erred in holding claim 1² obvious over Manning in view of Amadasi, Rosen, and Bulfer because the Examiner has not shown that there is any suggestion or motivation to combine Manning and Amadasi (Br. 5).

Appellants assert that the modification of Manning by Amadasi proposed in the Office action would render the prior art unsatisfactory for its intended purpose, because “it is not possible to attenuate the signals sent between telephones when the lines transmitting those signals are disconnected” (Br. 6). Appellants further assert that modifying Manning as proposed would render Manning inoperable, because substituting the open circuit of Amadasi for the a.c. load of Manning would have no effect. “A parallel-connected open circuit is irrelevant – indeed, meaningless. Put another way, connecting an open circuit in parallel has no effect....

² Appellants argue claims 1, 3-6, 8-10, 12, 13, and 15-20 together, so we will treat them as standing or falling together.

Modifying Manning as proposed by the Examiner ... will render Manning incapable of attenuating a signal at all” (Reply Br. 2). Further, “[i]f an open circuit is substituted for the parallel-connected a.c. load of Manning ... no power from the central office will flow through the circuit to power the circuit when the circuit is open. The open circuit may have enough power to open, but it won’t close again ... [m]odifying Manning as proposed by the Examiner, rather, will render Manning incapable of powering itself with d.c. current from the central telephone office” (Reply Br. 2). Appellants further argue that Manning teaches away from the modification proposed by the Examiner, because the circuit-blocking device of Amadasi would have to be connected in series to be operable, and Manning rejects serial connections as being difficult and expensive to install (Reply Br. 3). Finally, Appellants argue that Manning teaches away from Amadasi’s series connected open circuit, because such an open circuit would have extremely high attenuation, which Manning rejects as undesirable because it increases the time required to detect that a phone has been hung up (Reply Br. 4).

The Examiner asserts that Manning teaches attenuation, rather than actual open-circuiting, but that modification of Manning according to Amadasi would have been obvious because “the purpose and effect of attenuating a signal to the point that it cannot be recognized or picked up by the network is the same as open circuiting the telephone or data processing device” (Ans. 6). The Examiner further asserts that because Manning teaches selective inhibition of signals, the only difference between Manning and the instant invention is “the exact technique used for inhibition” (Ans. 11).

We agree with Appellants that the asserted combination would render the prior art (Manning) unsatisfactory for its intended purpose. Modifying Manning as suggested by Amadasi, such that an open circuit, rather than an attenuating a.c. load, is interposed between the telephone unit and telephone network, would be disadvantageous because Manning would no longer be able to power its device with d.c. power from the central office. Further, a stated goal of Manning is “transparency,” *i.e.* that a user is able to use the telephone as before without any inconvenience due to the presence of the inventive circuit(s)(FF 4). Manning’s device allows attenuation between the telephone unit and telephone network, followed quickly enough (e.g., 200 milliseconds) by a normal dial tone that the typical user will not notice or care that the dial tone was interrupted (FF 5). Modifying Manning to include the open circuit of Amadasi would not allow the user to hear a dial tone, a result which would frustrate Manning’s goal of transparency. Because the proposed modification would render Manning unsatisfactory for its intended purpose, there is no suggestion or motivation present to combine Manning and Amadasi [and Rosen and Bulfer].

We have also reviewed Rosen and Bulfer, but neither of these references supplies the motivation we find to be missing from the combination of Manning and Amadasi.

We therefore reverse the rejection of claim 1³, as well as claims 3-6, 8-10, 12, 13, and 15-20 not separately argued.

³ Independent claims 10 and 16-20 all contain the “selective open-circuiting” limitation Appellants contest with regard to claim 1.

Claims 2 and 11, dependent from claims 1 and 10 respectively, are separately argued by Appellants. For the reasons expressed above with regard to claims 1 and 10, we reverse the rejection of claims 2 and 11 as well.

CONCLUSION OF LAW

We conclude that Appellants have shown that the Examiner erred in rejecting claims 1-6, 8-13, and 15-20. On the record before us, Claims 1-6, 8-13, and 15-20 have not been shown to be unpatentable.

DECISION

The Examiner's rejection of claims 1-6, 8-13, and 15-20 is reversed.

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Application 09/046,677

REVERSED

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